

RAW SEQUENCE LISTING

3 -110 - APPLICANT: Farwick, Mike, et al.

PATENT APPLICATION: US/09/963,679

DATE: 12/28/2001 TIME: 16:12:00

Input Set : A:\032301.232.seq.ST25.txt Output Set: N:\CRF3\12282001\I963679.raw

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	37	cca	aat	cct	tea	ccq	gaa	atq	qaa	qcq	caq	caa	cqt	aaa	gag	ttq	cgc	3 3 9
															Glu			
	39				15					20					25			
	41	aag	cac	aag	gcc	att	gcc	act	ggc	ctg	ttg	att	ttt	get	gcc	get	gta	387
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	13			30					35					40				
															act			435
		Tyr		Leu	Cys	Arg	Phe		Glu	Thr	Arg	Pro		Glu	Thr	Ala	Ala	
	47		45					50					55					
															att			483
			Val	Gly	Phe	Val		Ala	Ala	Ala	Glu		Gly	Met	Ile	Gly		
	51						65					70					75	533
															cca			531
		Leu	Ala	Asp	Trp		Ala	vai	Thr	Ala		Pne	Arg	HIS	Pro	90	Trp	
	55					80				- 4 -	85				~ ~ ~		++ -	579
															gac Asp			379
	59	Leu	PIO	rre	95	HIS	1111	ALG	TTE	100	PIO	MIG	Lys	цуѕ	105	GIH	Leu	
		aat	gag	acc		age	aaa	+++	ata		cat	aac	ttc	cta	aat	acc	cad	627
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	63	JIY	JIU	110	Led	Set	SII	. 110	115	Jay		.1011	. 110	120				
		ctc	att		gaa	aaa	atc	t.c.t.		aca	caa	atc	cca		cgc	qcc	aga	675
															Arg			
	67		125			, -		130					135				1	

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70 Glu Trp Leu Ala		Asn Gly		Jal Ser i		
71 140	145		150		15	
73 ggc aaa ttg acc						
74 Gly Lys Leu Thr		Val Arg		asp Pro :		a
75	160		165		170	c 819
77 gaa gog gtg att						
78 Glu Ala Val Ile 79 175	Lys Ser Alc	180	ASP Lys I		314 PIO III 185	L
81 tqq qqc cca cca	get aga ega					a 867
8.2 Trp Gly Pro Pro						
84 190	Ald GLY ALG	195	GIU GIU I	200	ila Gla Al	4
85 aag oog aag cag	ttd tcc add		ege aut o		аса ала ад	a 915
86 Lys Pro Asn Gln						
87 205	210			215	2,0	,
89 ogt tyg get ccc					ag ege eg	e 963
90 Arg Trp Ala Pro						
91 220	225		230		2.3	
93 deg att tgg geg	ccg aaa tto	act gog	cag ctg c	gtc age :	gge aaa gt	e 1011
94 Pro Ile Trp Ala	Pro Lys Phe	Thr Ala	Gln Leu V	al Ser	Gly Lys Va	L
95	240		245		250	
97 tat gac gag gtc	ata aaa tto	act gaa	ged gtd g	get gee :	gat cct aa	c 1059
98 Tyr Asp Glu Val	Ile Lys Ph∈		Ala Val A			n
94 255		260			265	
101 cac gag gec ego	aaa teg et	a cac car	a ttc ctt	aat aaa	tita aca c	aa 1107
102 His Glu Ala Arg	l Lys Ser Le	u Arg Ar		Asn Lys		
103 270		u Arg Ar 275	g Phe Leu	Asn Lys 280	Leu Ala G	ln
103 270 105 gac ctg cag cat	gac cea gg	u Arg Ar 275 c atg at	g Phe Leu t att aaa	Asn Lys 280 gtt gaa	Leu Ala G	ln aa 1155
103 270 105 gac etg eag cat 106 Asp Leu Gln His	gac cca gg Asp Pro Gl	u Arg Ar 275 c atg at y Met Il	g Phe Leu t att aaa	Asn Lys 280 gtt gaa Val Glu	Leu Ala G	ln aa 1155
103 270 105 gac ctg cag cat 106 Asp Leu Gln His 107 285	gac cca gg Asp Pro Gl	275 c atg at y Met IL	g Phe Leu t att aaa e Ile Lys	Asn Lys 280 gtt gaa Val Glu 295	Leu Ala G gaa atc a Glu Ile L	ln aa 1155 ys
103 270 105 gac ctg cag cat 106 Asp Leu Gln His 107 285 109 cgc gac atc atg	gac cea gg Asp Pro Gl 29 ggc tec gg	u Arg Ar 275 c atg at y Met Il 0 c gcc at	g Phe Leu t att aaa e Ile Lys e geg caa	Asn Lys 280 gtt gaa Val Glu 295 gcc gcg	Leu Ala G gaa atc a Glu Ile L cca acc a	ln aa 11,55 ys te 1203
103 270 105 gac ctg cag cat 106 Asp Leu Gln His 107 285 109 cgc gac atc atg 110 Arg Asp Ile Met	gac cca gg Asp Pro Gl 29 ggc tcc gg Gly Ser Gl	u Arg Ar 275 c atg at y Met Il 0 c gcc at	g Phe Leu t att aaa e Ile Lys c gcg caa e Ala Gln	Asn Lys 280 gtt gaa Val Glu 295 gcc gcg	Leu Ala G gaa atc a Glu Ile L cca acc a Pro Thr I	ln aa 11,55 ys tc 1203 le
103 270 105 gac ctg cag cat 106 Asp Leu Gln His 107 285 109 cgc gac atc atg 110 Arg Asp Ile Met 111 300	gac cca gg Asp Pro Gl 29 ggc tcc gg Gly Ser Gl 305	eu Arg Ar 275 c atg at y Met Il 0 c gcc at y Ala Il	g Phe Leu t att aaa e Ile Lys c gcg caa e Ala Gln 310	Asn Lys 280 gtt gaa Val Glu 295 gcc gcg Ala Ala	Gaa atc a Glu Ile L cca acc a Pro Thr I	ln aa 1155 ys tc 1203 le 15
103 gac ctg cag cat 105 gac ctg cag cat 106 Asp Leu Gln His 107 285 109 cgc gac atc atg 110 Arg Asp Ile Met 111 300 113 tgg geg tca gcc	gac cca gg Asp Pro Gl 29 ggc tcc gg Gly Ser Gl 305	Arg Arg 275 c atg at y Met Ile 0 c gcc at y Ala Ile g ctc at	g Phe Leu t att aaa e Ile Lys c gcg caa e Ala Gln 310 t gaa tcc	Asn Lys 280 gtt gaa Val Glu 295 gee geg Ala Ala gea gaa	gaa atc a Glu Ile L cca acc a Pro Thr I 3 gat gag t	In  aa 1155 ys  tc 1203 le 15 ca 1251
103 270 105 gac ctg cag cat 106 Asp Leu Gln His 107 285 109 egc gac atc atg 111 300 113 tgg geg tca gcc 114 Trp Ala Ser Ala	gac cca gg Asp Pro Gl 29 ggc tcc gg Gly Ser Gl 305 c tcc gag tc	Arg Arg 275 c atg at y Met Ile 0 c gcc at y Ala Ile g ctc at	g Phe Leu t att aaa e Ile Lys c gcg caa e Ala Gln 310 t gaa tcc	Asn Lys 280 gtt gaa Val Glu 295 gee geg Ala Ala gea gaa	gaa atc a Glu Ile L cca acc a Pro Thr I 3 gat gag t	In  aa 1155 ys  tc 1203 le 15 ca 1251
103 270 270 270 270 270 270 270 270 270 270	gac cca gg S Asp Pro Gl 29 ggc tcc gg Gly Ser Gl 305 tcc gag tcc Ser Glu Se 320	n Arg Ar 275 c atg at y Met II. 0 c gcc at y Ala II. g ctc at r Leu II.	g Phe Leu t att aaa e Ile Lys c gcg caa e Ala Gln 310 t gaa tcc e Glu Ser 325	Asn Lys 280 gtt gaa Val Glu 295 gcc gcg Ala Ala gca gaa Ala Glu	Leu Ala G gaa atc a Glu Ile L cca acc a Pro Thr I 3 gat gag t Asp Glu S 330	In  aa 1155 ys  tc 1203 le 15 ca 1251 er
103 270 105 gac ctg cag cat 106 Asp Leu Gln His 107 285 109 ege gac atc atg 110 Arg Asp Ile Met 111 300 113 tag geg tca gcc 114 Trp Ala Ser Ala 115 117 tca att ctg cgt	gac cca gg S Asp Pro Gl 29 ggc tcc gg Gly Ser Gl 305 c tcc gag tc Ser Glu Se 320	Arg Arg Arg 275 c atg at y Met Ilo 0 c gcc atg at y Ala Ilo g ctc atgrater Leu Ilo t gcc gac	g Phe Leu t att aaa e Ile Lys c gcg caa e Ala Gln 310 t gaa tcc e Glu Ser 325 a gca gct	Asn Lys 280 gtt gaa Val Glu 295 gcc gcg Ala Ala gca gaa Ala Glu acc agc	Leu Ala G gaa atc a Glu Ile L cca acc a Pro Thr I gat gag t Asp Glu S 330 tgg ggt c	In  aa 1155 ys  tc 1203 le 15 ca 1251 er  aa 1299
103 270 270 270 270 270 270 270 270 270 270	gac cca gg Asp Pro Gl 29 Ggc tcc gg tcc gag tc Ser Glu Ser 320 c cgc aaa at Arg Lys Il	Arg Arg Arg 275 c atg at y Met Ilo 0 c gcc atg at y Ala Ilo g ctc atgrater Leu Ilo t gcc gac	g Phe Leu t att aaa e Ile Lys c gog caa e Ala Gln 310 t gaa toc e Glu Ser 325 a goa got u Ala Ala	Asn Lys 280 gtt gaa Val Glu 295 gcc gcg Ala Ala gca gaa Ala Glu acc agc	Leu Ala G gaa atc a Glu Ile L cca acc a Pro Thr I gat gag t Asp Glu S 330 tgg ggt c	In  aa 1155 ys  tc 1203 le 15 ca 1251 er  aa 1299
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103 270 270 105 280 281 281 282 285 285 285 285 285 285 285 285 285	gac cca gcg s Asp Pro Gl 29 ggc tcc gg GGy Ser Gl 305 c tcc gag tc Ser Glu Se 320 c cgc aaa at Arg Lys Il c gac gac tc Asp Asp Se	u Arg Ar 275 c atg atr y Met II- 0 c qcc atr y Ala II- g ctc atr r Leu II- t gcc gar e Ala Gh c ctc cgr r Leu Arr 355 c gcc gar	t att aaa e Ile Lys c gcg caa e Ala Gln 310 t gaa toc e Glu Ser 325 a gca gct i Ala Ala g cat toa g dat toa	Asn Lys 280 gtt gaa val Glu 295 gec geg Ala Ala Glu acc agc Thr Ser ctc gac Leu Asp 360 gec cec	Leu Ala G  gaa atc a Glu Ile L  cca acc a Pro Thr I  gat gag t Asp Glu S 330  tgg ggt c Trp Gly G 345 acc cgg a Thr Arg I  gaa gtc a	In
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103 gac etg eag eat 106 Asp Leu Gln His 107 285 109 eeg gac atc atg 110 Arg Asp Ile Met 111 300 113 teg geg tag etg etg etg etg etg etg etg etg etg et	gac cca gg Asp Pro Gl ggc tcc gg Gly Ser Gl 305 tcc gag tc 320 cgc aaa at Arg Lys Il c gac gac tcc Asp Asp Se	u Arg Arc 275 275 275 275 275 275 275 275 275 275	g Phe Leu t att aaa e Ile Lys c gcg caa e Ala Gln 310 t gaa toc e Glu Ser 325 a gca gct a Ala Ala d att caa g His Ser c att ca	Asn Lys 280 gtt gaa val Glu 295 gcc gcg Ala Ala Glu acc agc Thr Ser ctc gac Leu Asp 360 gcc ccc Ala Pro 375	Leu Ála G gaa atc a Glu Ile L cca acc a Pro Thr I 3 gat gag t Asp Glu S 330 tgg ggt c Trp Gly G 345 Thr Arg I gaa gtc a Glu Val T	In
103 gac dt cag cat 106 Asp Leu Gln His 107 285 109 cog ogac atc atc 110 Arg Asp Ile Met 111 300 113 tog geg tca gc 114 Trp Ala Ser Ale 115 117 tca att ctg cgt 118 Ser Ile Leu Arg 119 335 121 aga ttg ctt gtc 122 Arg Leu Leu val 123 350 125 acc gg gc gcc gtc 126 Thr Gly Ala Ala 127 365	gac cca gegs Asp Pro Gl ggc tcc gg GGy Ser Gl Ser Glu Se 320 cca aaa at Arg Lys Il ggac gac tcc gac gac tcc gac ttc ct Ala Phe Le Lagaa acc at	u Arg Ari 275 atg atg at y Met II.0 c qcc atr y Ala II. g ctc atr r Leu II. t gcc ga. e Ala Gli 34: c ctc cgc r Leu Ari c gcc ga. u Ala Asigo t gaa cgd	g Phe Leu t att aaa e Ile Lys c geg caa e Ala Gln 310 L gaa tcc e 325 a gca gct a Ala Ala o cat caa g His Ser c aat tac o Asn Tyr a tgg gac	Asn Lys 280 gtt gaa a Val Glu 295 gcc gcg Ala Ala gca gaa Ala Glu acc agc Thr Ser ctc gac Leu Asp 360 gcc ccc Ala Pro 375 gct gaa	gaa atc a Glu Ile L cca acc a Pro Tr I gat gag t Asp Glu S 330 149 ggt c 345 345 346 345 346 347 348 348 348 349 349 349 349 349 349 340 349 340 340 340 340 341 340 341 340 340 341 340 340 340 340 340 340 340 340 340 340	In
103 gac dtg cag cat 105 gac dtg cag cat 106 Asp Leu Gln His 107 285 109 cog gac atc atg 110 Arg Asp Ile Met 111 300 113 tag geg tca gcc 114 Trp Ala Ser Ala 115 117 tca att ctg cgt 118 Ser Ile Leu Arg 119 335 121 aga ttg ctt gtc 122 Arg Leu Leu Val 123 350 125 acc gcg ccg gct 126 Thr Gly Ala Ala 127 365 129 ggc att atc tcc 130 Gly Ile Ile Ser	gac cca gegs Asp Pro Gl 2 gg C Ca ger Glu Ser Glu Thr Il	u Arg Ari 275 atg atg at y Met II.0 c qcc atr y Ala II. g ctc atr r Leu II. t gcc ga. e Ala Gli 34: c ctc cgc r Leu Ari c gcc ga. u Ala Asigo t gaa cgd	g Phe Leu t att aaa e Ile Lys c gcg caa e Ala Gln gaa tcc e Glu Ser 325 i gca gct i Ala Ala i gca gct i Ala Ser c att ac o Asn Tyr a tgg gac g trp Age	Asn Lys 280 gtt gaa a Val Glu 295 gcc gcg Ala Ala gca gaa Ala Glu acc agc Thr Ser ctc gac Leu Asp 360 gcc ccc Ala Pro 375 gct gaa	gaa atc a Glu Ile L cca acc a Pro Thr I gat gag t Asp Glu S 430 451 451 451 451 451 451 451 451 451 451	In aa 1155 ys 1203 le 15 ca 1251 er 1299 In 1347 le 1347 le 26 1395 hr 1443
103 gac dt cag cat 106 Asp Leu Gln His 107 285 109 cog ogac atc atc 110 Arg Asp Ile Met 111 300 113 tog geg tca gc 114 Trp Ala Ser Ale 115 117 tca att ctg cgt 118 Ser Ile Leu Arg 119 335 121 aga ttg ctt gtc 122 Arg Leu Leu val 123 350 125 acc gg gc gcc gtc 126 Thr Gly Ala Ala 127 365	gac cca gg s Asp Pro Gl ggc tcc gg g GJy Ser Gl 305 c tcc gag tc Ser Glu Se 320 c cg aaa at Arg Lys II g gac gac tc Asp Asp Se c ggc ttc ct 1 Ala Phe Le 1 Gu Thr II 385	u Arg Arc 275 c atg at g t y Me II- 0 c gcc at- y Ala II- g ctc at' r Leu II- c the II- c ctc cgcc ga- e Ala GI- c gcc ga- e Ala GI- c ctc cgc r Leu Arc 355 c gcc ga- u Ala As  0 t gaa cg- e Glu Arc	g Phe Leu t att aaa e Ile Lys c gcg caa e Ala Gln 310 t gaa tcc g Glu Ser 325 a gca gct 1 Ala Ala g cat tca g His Ser c aat tac o Asn Tyr 1 tgg gac g Typ Asp 390	Asn Lys gtt gaa val Glu 295 gcc gcg Ala Ala gca gaa Ala Glu acc agc Thr Ser ctc gac Leu Asp 360 gcc ccc Ala Pro 375 gct gaa Ala Glu	Leu Ala G  gaa atc a Glu Ile L  cca acc a Pro Thr I  330  tgg ggt c  Trp Gly G  345  gaa gtc a Glu Val T  gaa gtc t Glu Ala S  3 3	In

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Output Set: N:\CRF3\12282001\1963679.raw									
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166 20 25 169 Ala Thr Gly Leu Leu Ile Phe Ala Ala Ala Val Tyr Phe Leu Cys Arg									
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330 325 325 326 242 215 Lys Ile Ala Glu Ala Ala Thr Ser Trp Gly Gln Arg Leu Leu Val Asp 350 340 345 345 340 Ala Ala Ala	
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139 Asp Set Lea May 360 150 355 153 Phe Leu Ala Asp Asn Tyr Ala Pro Glu Val Thr Gly 11e Ile Ser Glu 154 370 155 Thr 11e Glu Arg Trp Asp Ala Glu Glu Ala Ser Glu Lys Ile Glu Leu 157 Thr 11e Glu Arg Trp Asp Ala Glu Glu Ala Ser Glu Lys Ile Glu Leu 158 Thr 11e Glu Arg Trp Asp Ala Glu Glu Ala Ser Glu Lys Ile Val	
257 Thr Ile Glu Arg Trp Asp Ala Glu 395 396 258 385 261 Met Val Gly Lys Asp Leu Gln Tyr Ile Arg Leu Asn Gly Thr Ile Val 415 410 415 Leu Phe	
261 Met Val Gly Lys Asp feet of 1410 262 His The Leu Phe 265 Gly Ala Leu Ala Gly Leu Ala Ile Tyr Ala Ile Ser His Ile Leu Phe 425 430	
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/963,679

DATE: 12/28/2001

TIME: 16:12:01

Input Set : A:\032301.232.seq.ST25.txt Output Set: N:\CRF3\12282001\1963679.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date